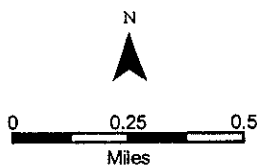
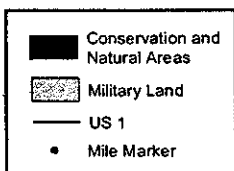
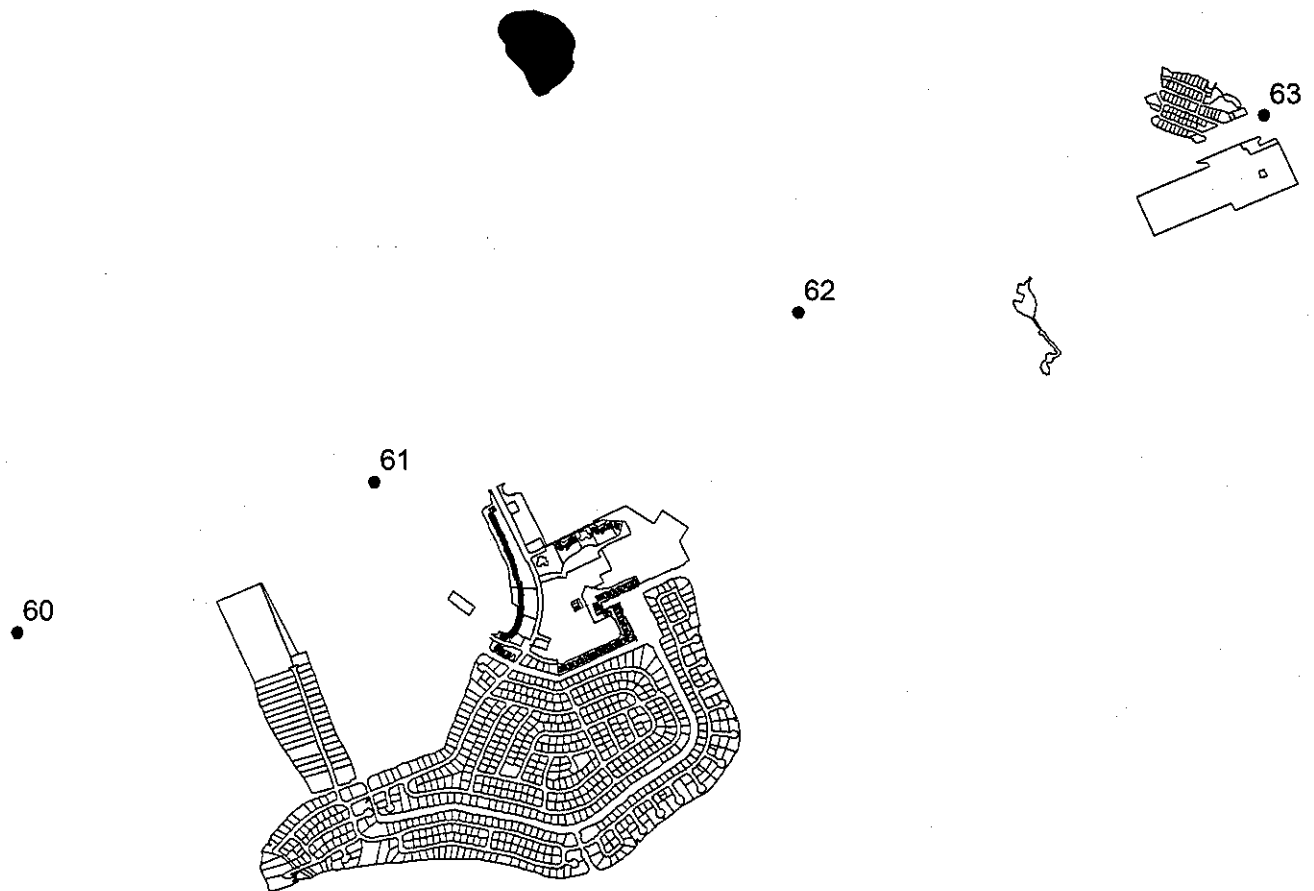


# Monroe County Conservation and Natural Areas MM 60 to 63

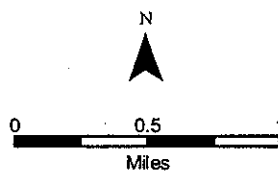
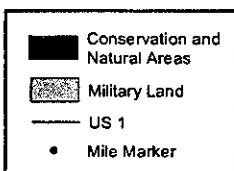
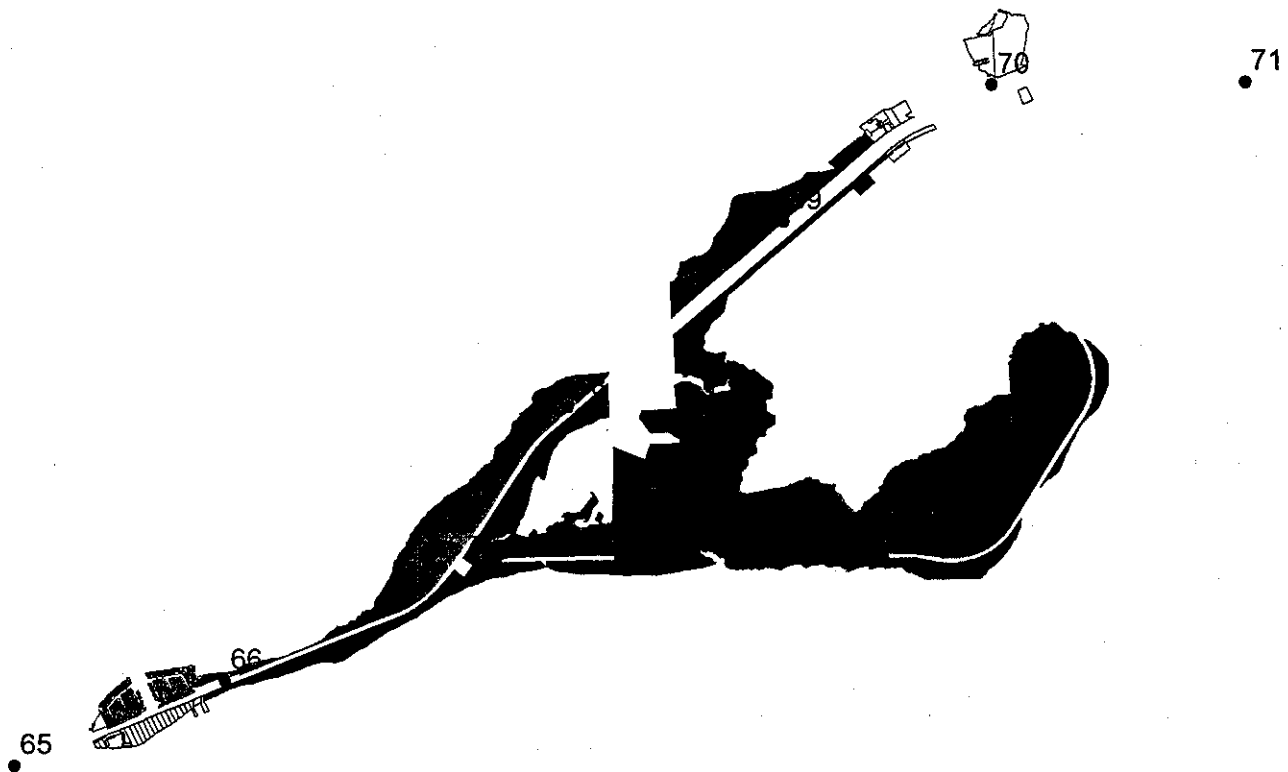


Monroe County  
Planning and Environmental  
Resources Department

This map is for Monroe County Growth Management Division purposes only. The data contained herein is illustrative and may not accurately depict boundaries, parcels, roads, right of ways, or identification information.

Prepared By: K.R. Date: 02/25/04

Monroe County  
Conservation and Natural Areas  
MM 65 to 71

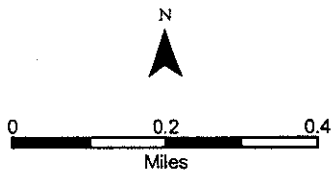
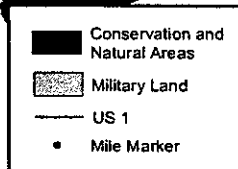
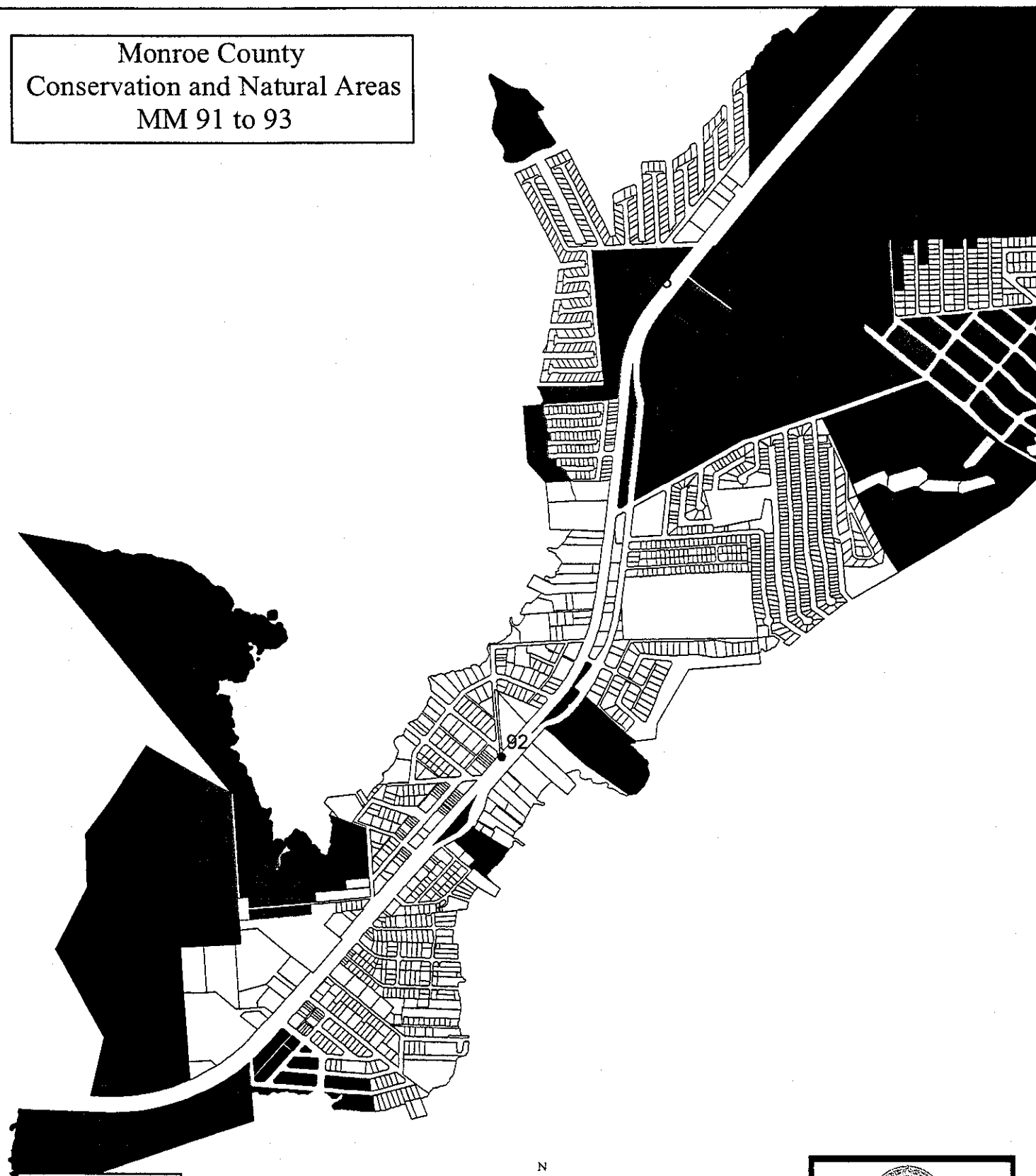


Monroe County  
Planning and Environmental  
Resources Department

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Prepared By: K.R. Date: 2/25/04

# Monroe County Conservation and Natural Areas MM 91 to 93

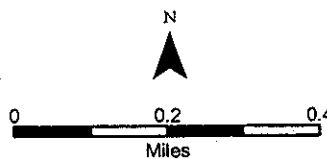
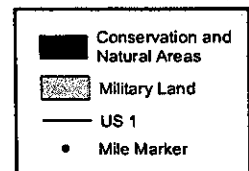
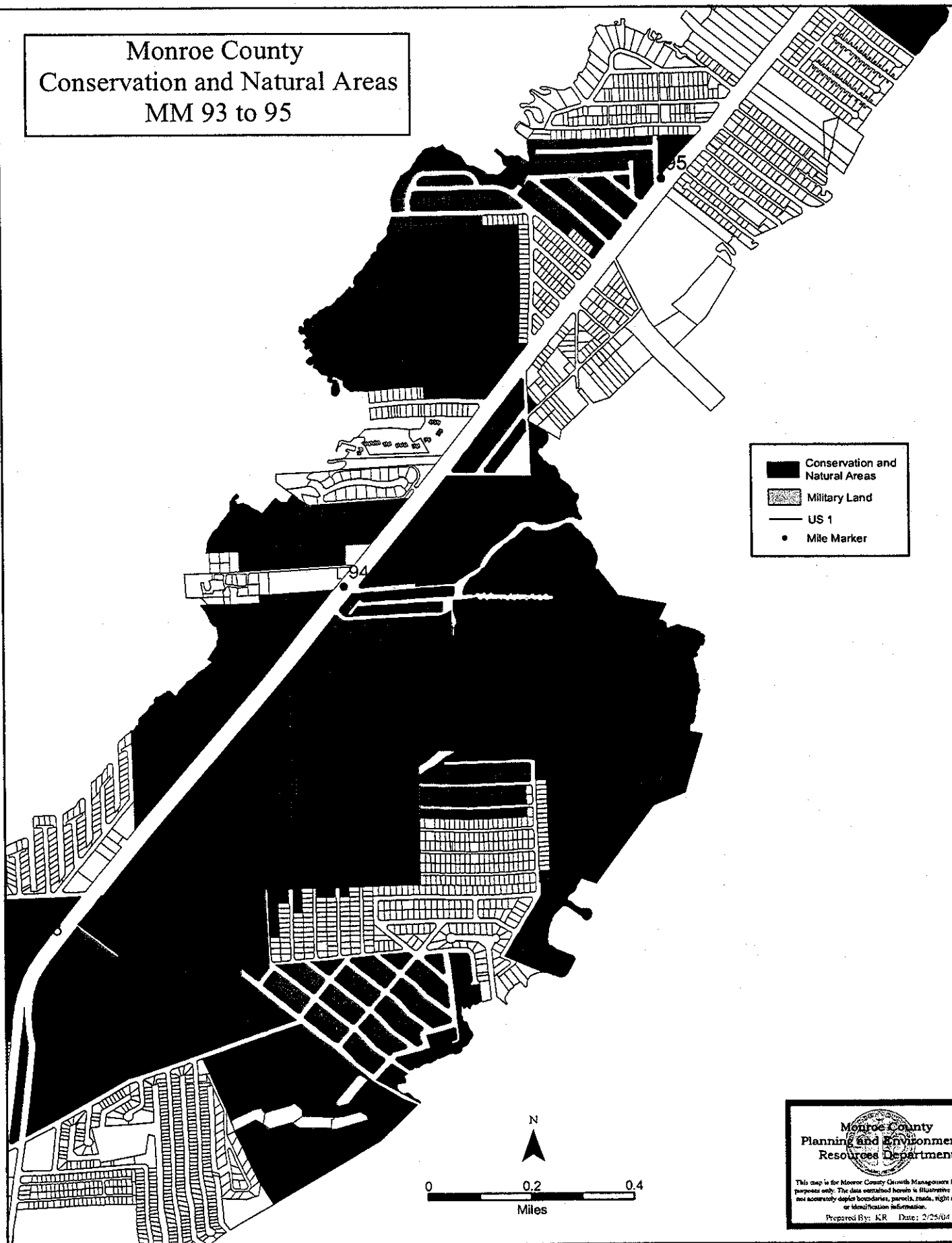


Monroe County  
 Planning and Environmental  
 Resources Department

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Prepared By: KR Date: 2/25/04

Monroe County  
Conservation and Natural Areas  
MM 93 to 95

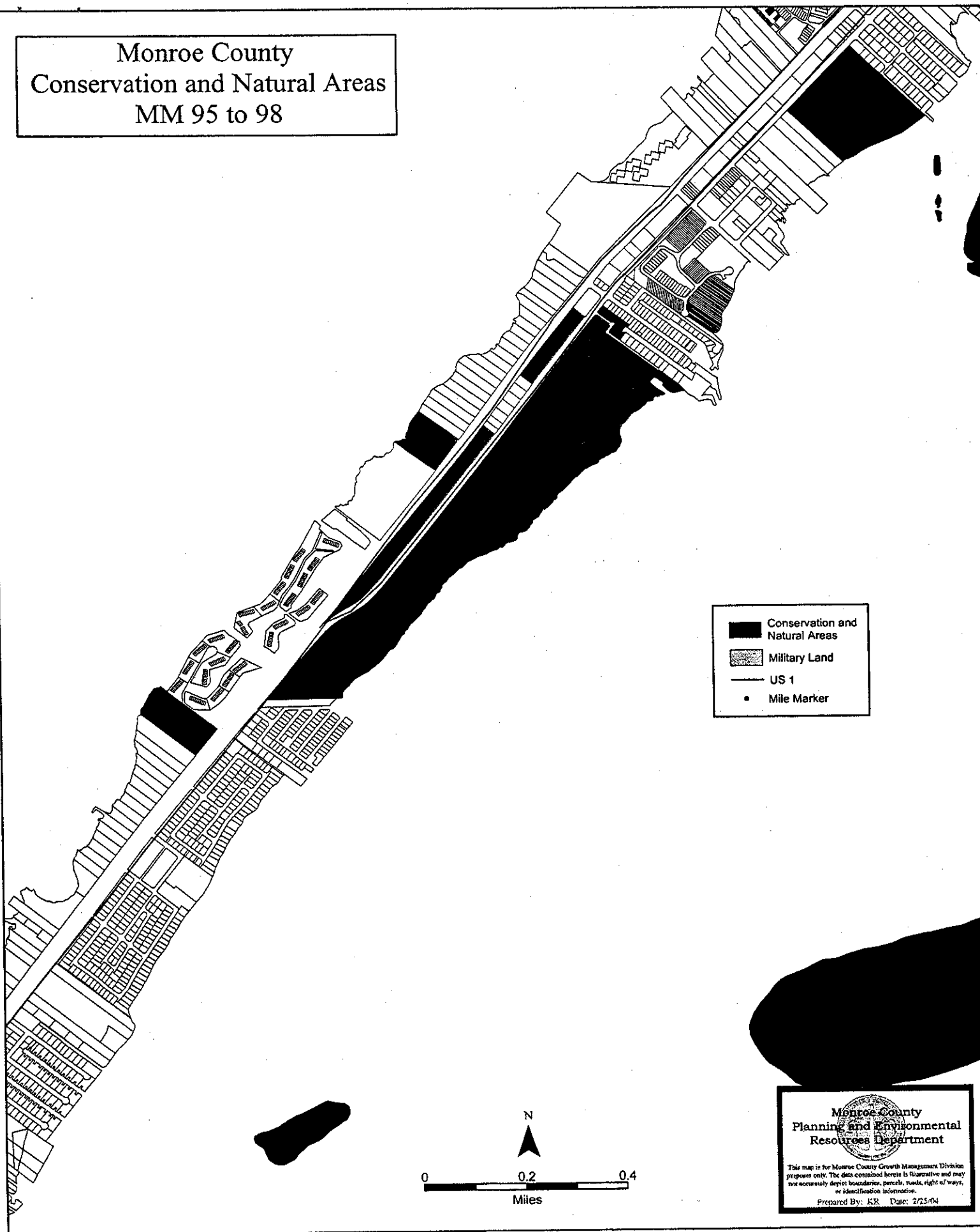


**Monroe County**  
**Planning and Environmental**  
**Resources Department**

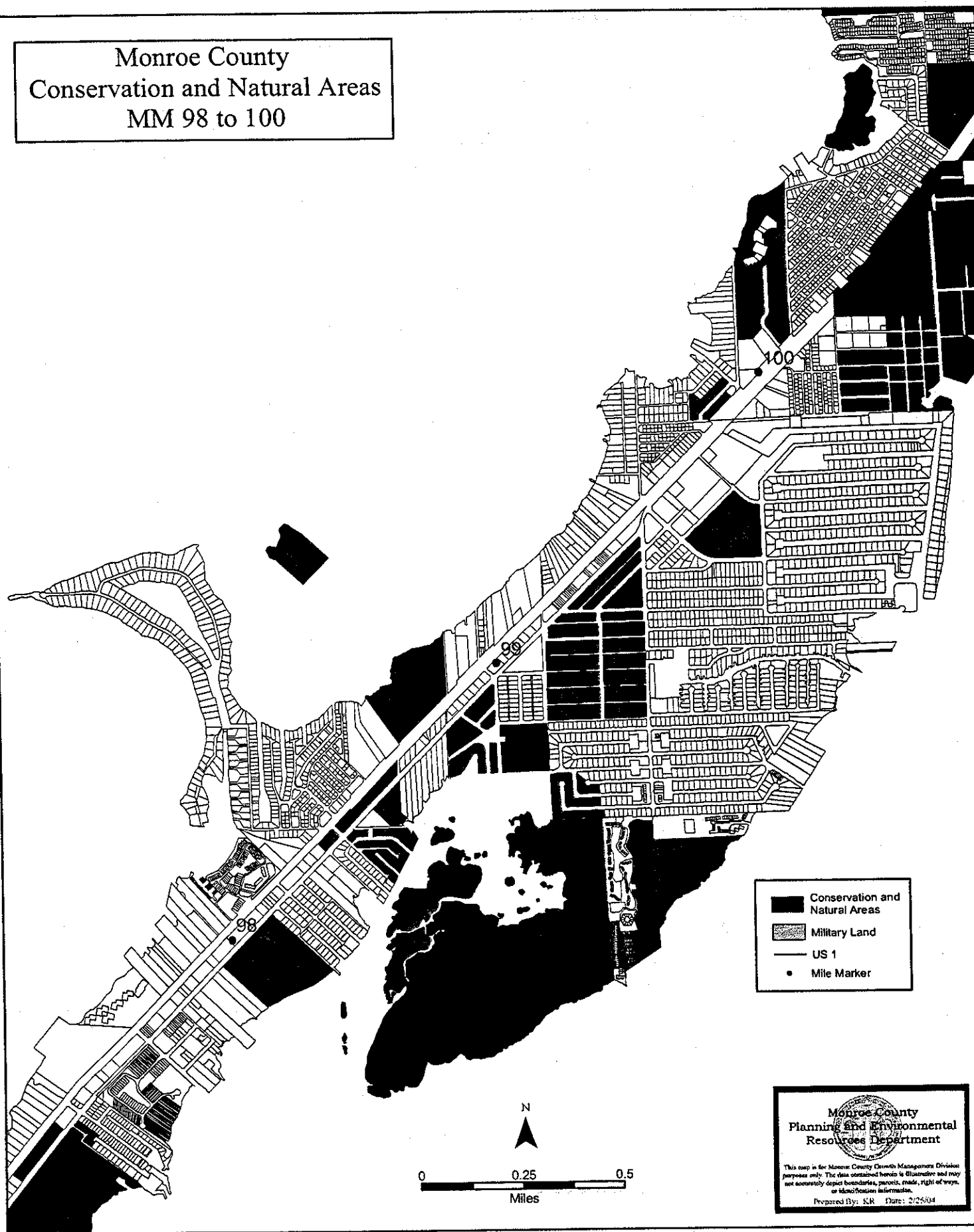
This map is for Monroe County Growth Management Division purposes only. The data contained herein is illustrative and may not accurately depict boundaries, parcels, roads, right of ways, or identification information.

Prepared By: KR Date: 2/25/04

Monroe County  
Conservation and Natural Areas  
MM 95 to 98



Monroe County  
Conservation and Natural Areas  
MM 98 to 100



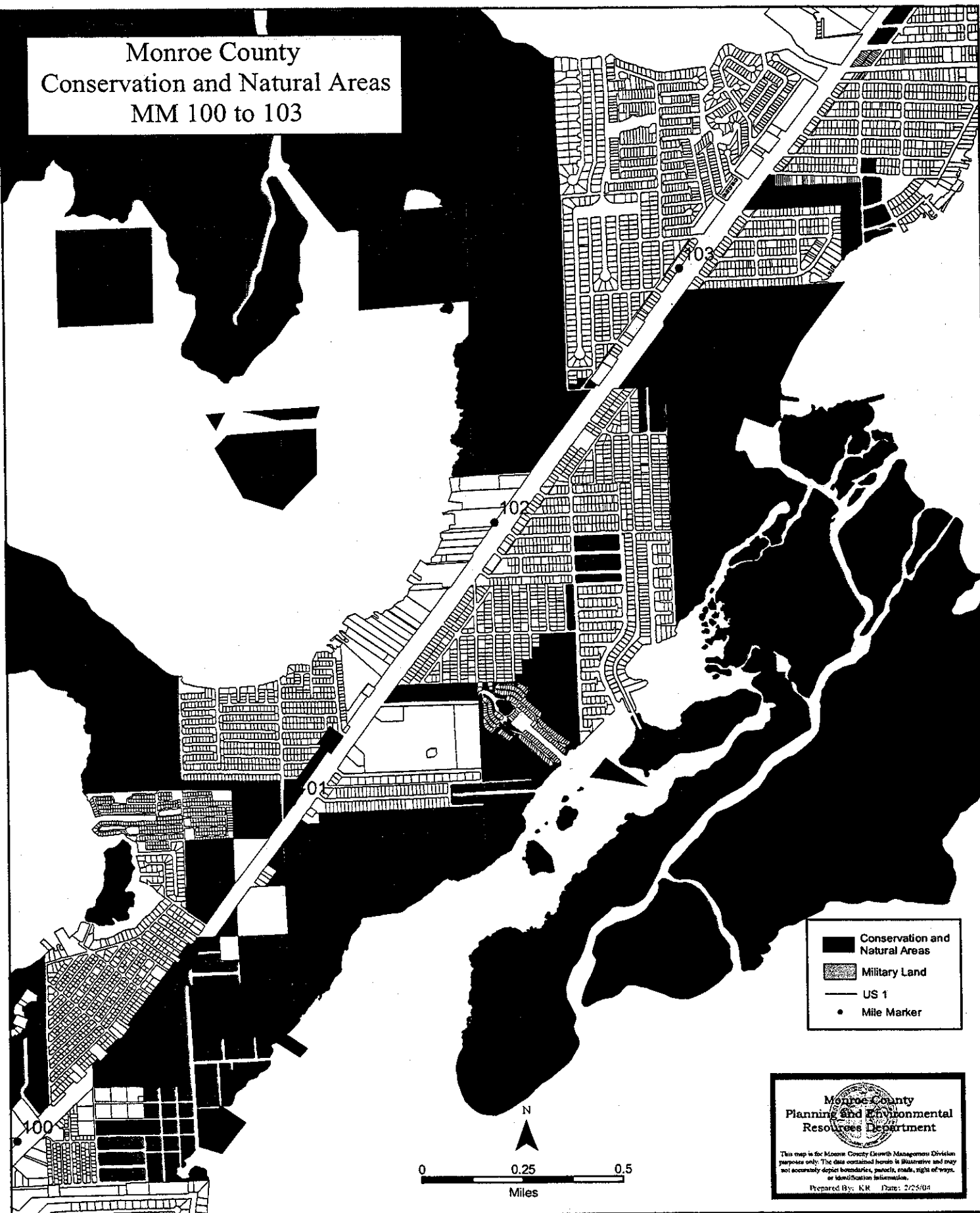
- Conservation and Natural Areas
- Military Land
- US 1
- Mile Marker

**Monroe County  
Planning and Environmental  
Resources Department**

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Prepared By: KR Date: 2/25/04

Monroe County  
Conservation and Natural Areas  
MM 100 to 103



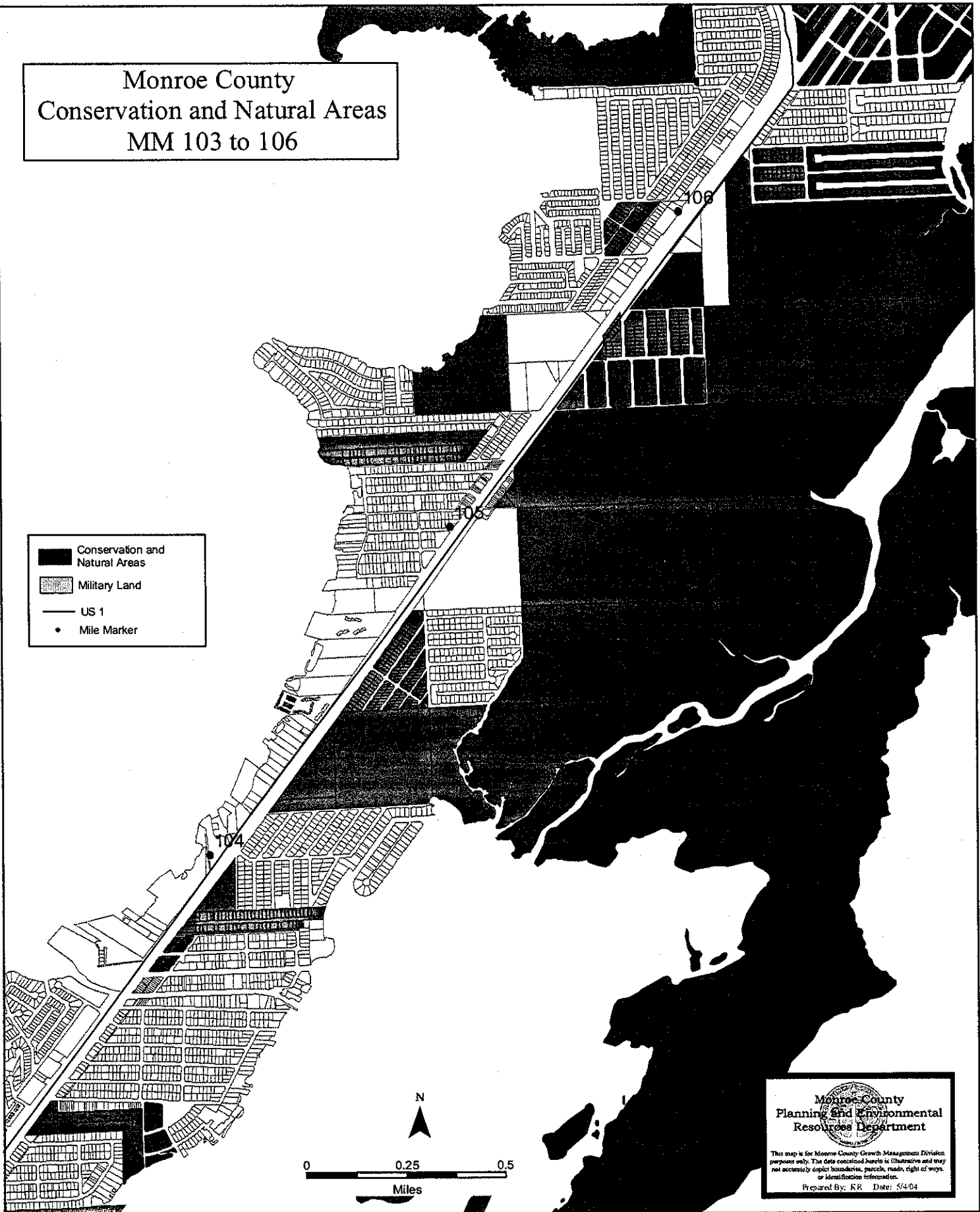
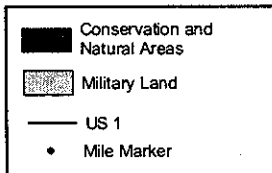
- Conservation and Natural Areas
- Military Land
- US 1
- Mile Marker

Monroe County  
Planning and Environmental  
Resources Department

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Prepared By: K.R. Date: 2/25/04

Monroe County  
Conservation and Natural Areas  
MM 103 to 106



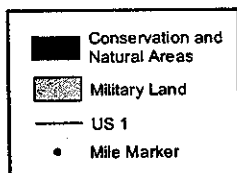
Monroe County  
Planning and Environmental  
Resources Department

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not accurately depict boundaries, parcels, roads, right of ways,  
or identification information.

Prepared By: KR Date: 5/4/04



# Monroe County Conservation and Natural Areas MM 105 to 108



0 0.25 0.5  
Miles



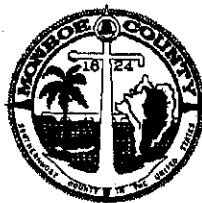
Monroe County  
Planning and Environmental  
Resources Department

This map is for Monroe County Growth Management Division purposes only. The data contained herein is illustrative and may not accurately depict boundaries, parcels, roads, right of ways, or identification information.  
Prepared By: KR Date: 2/25/04

# STAFF REPORT

# County of Monroe

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2798 Overseas Highway  
Suite 410  
Marathon, Florida 33050  
Voice: 305.289. 2500  
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Board of County Commissioners  
Mayor Murray Nelson, District 5  
Mayor Pro Tem David Rice, District 4  
Comm. Charles "Sonny" McCoy, District 3  
Comm. George Neugent, District 2  
Comm. Dixie Spehar, District 1

## MEMORANDUM

TO: Board of County Commissioners

FROM: Timothy J. McGarry, AICP *TJM*  
Director of Growth Management

DATE: May 3, 2004

SUBJECT: **Amended Draft Interim Moratorium Ordinance**

### Overview

The Board of County Commissioners is requested to consider an amended draft ordinance deferring ROGO and NROGO allocations in areas of tropical hardwood hammock or pinelands of one acre or greater. Except as discussed in the following paragraph, the amended draft ordinance incorporates revisions directed by the Board of County Commissioners at the initial public hearing on the draft ordinance held on April 21, 2004. A copy of the amended draft ordinance showing additions and deletions made to the initial draft ordinance is provided to assist the Board in its deliberations.

It should be noted that in its motion, the Board had directed staff to expand the Conservation and Natural Areas to include all areas of tropical hardwood hammock or pinelands of one-acre or greater. Unfortunately, the staff did not have an opportunity at the public hearing to explain the problems inherent with such an expansion.

Basically, the expansion of the Conservation and Natural Areas (CNA) to include these one-acre or larger habitat patches outside of the currently designated CNA boundaries, solely based upon a one-acre habitat criterion, is not consistent with the designation criteria for such areas under Goal 105 and the standards identified in Resolution 346-2003. Furthermore, it does not take into consideration existing development patterns or habitat coverage, which are critical elements in assigning such a designation.

The amended draft ordinance does not include all tropical hardwood hammock or pinelands patches of one acre or greater in the CNA boundaries which was the intent of Commissioner Neugent's motion. Although, all patches are included in the proposed moratorium. If the Board

decides that it wants to revise the County's approach to habitat protection to include even small, isolated habitat patches, then additional staff time will be required to prepare the necessary policy framework.

This memorandum provides a description and analysis of the proposed ordinance followed by the staff's conclusions and recommendations. The Growth Management Division staff does not recommend adoption of the proposed amended draft ordinance as it extends the moratorium to properties outside of the Conservation and Natural Areas. Instead, the staff recommends that the Board further amend the draft ordinance to limit the moratorium to parcels located within the boundaries of the Conservation and Natural Areas.

### **Description of Amended Draft Ordinance**

The amended ordinance defers ROGO and NROGO allocations in areas of tropical hardwood hammock or pinelands of one or more acres in all of unincorporated Monroe County except Big Pine and No Name Key and Ocean Reef, regardless of whether or not the subject parcels are located within the Conservation and Natural Areas. Although the Conservation and Natural Area Maps are no longer germane to the moratorium, the revised ordinance still includes adoption of these maps; however, the ordinance spells out that revisions to these maps may be done by resolution of the Board rather than by ordinance. The CNA maps will continue to be used to identify acquisition areas and areas appropriate for ROGO lot dedication.

As explained to the Board at the April 21 public hearing, the Planning and Environmental Resources Department staff has continued to review and process requests for revisions to the Conservation and Natural Areas boundaries (See Planning Director's memorandum in Attachment #1). The Conservation and Natural Areas Maps attached to the amended draft ordinance reflect the revisions recommended by staff in the Planning Director's attached memorandum.

As requested by the Board, to facilitate the administration of the moratorium and reduce subjectivity in its application, the amended ordinance requires that the Florida Marine Resources Institute (FMRI) ADID maps, produced from 1991 aerial photographs at 1:13,200 scale, are the sole basis for identification of the one-acre or greater habitat patches. Sole reliance on these maps is intended to simplify the identification process and eliminate the necessity for interpretation of aerial photographs and site visits to update habitat data. Maps prepared for the Florida Keys Carrying Capacity Study by FMRI will also be used, although because of the limitations of the data used for mapping overlays the parcel data may be inaccurate. (See attachment #2)

In determination of patch size, only U.S. Highway 1 is considered a break in habitat, not County or private roads regardless of their width or type of surface, and regardless of the absence of any tree canopy extending across the roadway. As only land cover patches of one-acre or more are depicted on the FMRI maps, these changes will somewhat simplify the designation of parcels subject to the moratorium.

As this amended ordinance will affect applications that have already entered the system since January 14, 2004, the recommended vesting date for any application in the ROGO/NROGO process has been revised from January 13, 2004, to April 13, 2004.

### **Analysis of Amended Draft Ordinance**

In its analysis of this amended ordinance, the staff focused on two specific deficiencies in the initial draft ordinance identified by the public and Board: (1) need for simplification and elimination of subjectivity in the identification of parcels subject to the interim moratorium and the need for maps identifying specific parcels subject to the moratorium; and, (2) need for expansion of the moratorium to include habitat patches outside of the Conservation and Natural Areas.

#### **1. Simplicity, Elimination of Subjectivity, and Specific Maps.**

##### Simplicity

It was stated by several members of the public at the public hearing, that the reduction of the habitat threshold from two-acres to one-acre (the minimum land cover area identified in the FMRI ADID Maps) would simplify the identification of parcels subject to the moratorium. Although the smaller acreage threshold may on the surface appear to be easier to apply, in reality differences in the two data layers (parcel and habitat) and the scale (1:13,200) of the aerial photographs from which the habitat layer was produced still require staff interpretation and manipulation even with the reduction in habitat area.

The argument that using one-acre rather than two acre patches would be simpler is only valid in that staff will not have to exclude any subject habitat using the FMRI ADID Maps, as the minimum patch size depicted on these maps is one acre. However, as habitat boundaries do not follow man-made boundaries (parcels) and may extend over numerous individual parcels, it still is difficult to determine and map which parcels will be directly impacted by the moratorium without reviewing specific site plans for proposed development.

Furthermore the FMRI maps, which were produced from large scale aerial photographs, are subject to digitizing and data errors. Attachment #3 is a digital map that provides an example of this problem and the inconsistencies between the habitat and parcel data layers. [Note: the amended draft ordinance provides a process for addressing map errors or staff errors in the application or interpretation of the maps.]

##### Elimination of Subjectivity

Another concern raised by the public was the amount of staff field work involved and the subjective and inconsistent criteria that may be used in designating parcels subject to the moratorium as no maps of the specific parcels are available. This argument did not recognize that currently every development application involving a property with habitat requires an existing conditions report that must be verified through field visits by staff. It also overlooks the fact that this field work was intended under the previous proposal to update patch sizes based on clearing and new growth, as the habitat maps are over 13 years old.

To address these public concerns, the draft amended ordinance requires that the FMRI ADID Maps be solely used to identify specific parcels subject to the moratorium. The one-acre patches have already been mapped using the Growth Management Division's GIS. [Attachment #4 is a set of GIS maps depicting the boundaries of the Conservation and Natural Areas (shown in gray) and tropical hardwood hammock or pineland habitat patches of one acre or more (shown in red outline).]<sup>1</sup>

However, without expenditure of extensive staff time to manipulate the parcel and habitat layers to ensure a fit, these maps, even if depicting one-acre minimum patches, will still require staff interpretation and adjustment on a case-by-case basis. In all likelihood, many of the one-acre or greater habitat patches shown on these maps, particularly those situated outside of the designated Conservation and Natural Areas, have had significant development and clearing over the last 13 years. This fact argues against sole reliance on habitat cover from the FMRI ADID Maps as the sole criterion for imposition of the moratorium without further updating which require staff analysis and further ground-truthing.

#### Roadways

The proposed ordinance also specifies that, except for U.S. Highway 1, a road, irrespective of width or type of surface, will not constitute a break in habitat. While this may simplify the identification of habitat patches, it is not based on sound biological science, as most roads, except those where significant canopy exists, segment and disrupt the habitat, increasing the intensity of "edge effects" such as the patch's vulnerability to secondary human effects, intrusion of invasive plants, and adverse impacts of light and noise exposure and temperature variations. [Attachment #4 is a technical memorandum from Dr. Ricardo Calvo, the County's environmental expert and project manager of the Florida Keys Carrying Capacity Study discussing this effect.]

## **2. Expansion of Moratorium Outside of Conservation and Natural Areas.**

The proposed amended draft ordinance expands the moratorium to include all tropical hardwood hammock or pineland patches of one acre or greater throughout unincorporated Monroe County, except where exempted or not subject to ROGO/NROGO. The staff estimates that it would potentially expand the number of acres of habitat subject to the moratorium from 916 acres (habitat of two-acres or greater within the boundaries of Conservation and Natural Areas) to 1,076 acres of privately-owned vacant lands. <sup>2</sup>[Attachment #4 depicts the one-acre or greater habitat patches, outlined in red that would be subject of the moratorium.]

Other than for "simplification purposes" (see previous discussion), the rationale for the one-acre threshold was not thoroughly discussed by the Board. However, written documentation was presented at the hearing from the public that called for "all undeveloped hammocks and pinelands *regardless of size* [emphasis added] should be protected and new development should be directed to thousands of lots that are not environmentally sensitive."

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<sup>1</sup> The Conservation and Natural Areas Maps reflect boundaries shown in the attachment to initial Interim Development Ordinance considered by the BOCC on April 21, 2004 and does not reflect boundary amendments proposed in the Planning Director's memorandum in Attachment #1.

<sup>2</sup> Within the Conservation and Natural Areas are 941 acres of tropical hardwood or pinelands habitat contained in patches of one acre or more, which are vacant and privately-owned.

The Growth Management Division staff do not recommend the inclusion in the moratorium of small, isolated habitat areas outside of the Conservation and Natural Areas. As stated in a January 15, 2004, Growth Management Division staff memorandum to the Board of County Commissioners on this very issue, the building block for the designation of the Conservation and Natural Areas was based on the 4 acre minimum upland habitat considered by experts who did the Florida Carrying Capacity Study as the minimum threshold for a viable habitat.

The designation of the boundaries took into consideration the need for buffers, opportunities for connectivity of isolated patches through restoration and re-growth, distribution of developed and cleared lands, existing habitat configuration and size, presence of canals and roads, etc. Within these boundaries are small patches of habitat between one to four acres in size or smaller that can be preserved, reconnected to larger patches, and properly managed.

Any small isolated patches of upland habitat outside of Conservation and Natural Areas are not considered to have long-term viability as habitat of any regional, state, or national importance, but may be of neighborhood or local importance. These patches are isolated, impacted by development, and/or can not be connected with other habitat areas; therefore, they did not warrant being designated within the Conservation and Natural Areas. This policy direction is directly supported by the science in the Florida Keys Carrying Capacity and corroborated by the County's consultant, Dr. Ricardo Calvo, who was project director for that study.

The Growth Management Division staff believes that the current regulations, supplemented by minor regulatory revisions and land acquisition programs will help preserve those small isolated patches not included in the CNA that may be of significance to neighborhoods. Therefore, the staff believes it would be inappropriate to place any type of moratorium on upland habitat outside of the designated Conservation and Natural Areas; as such a moratorium would conflict with the policy basis for the establishment and designation of Conservation and Natural Areas and good environmental science.

In particular, calling for a moratorium on specific areas where the County wants to encourage development may weaken the legal and policy basis for the moratorium. If public financial resources were infinite, the County could attempt to buy up all the parcels containing these small, isolated habitats; however, with limited funding resources, acquisition of potential lands for conservation must be prioritized. As Dr. Calvo recommends in the attached memorandum:

“Conservation and acquisition should focus on larger, connected habitat patches, because they provide for a) protection of a larger number of species, b) the preservation of ecological processes, and c) a buffer against the secondary impacts of human activity on native areas.

Efforts to preserve biodiversity and the ecological value of upland habitats in the Florida Keys should give priority to larger patches and those smaller patches that are or can be connected to larger patches. Tier I [Conservation and Natural Areas] lands were delineated based on these criteria.”

## **Conclusions**

The Growth Management Division staff finds that the amended draft ordinance further complicates rather than simplifies the moratorium and will not make it more translucent or understandable to the public. It will create additional administrative burden on staff as the number of development applications that may be subject to this moratorium will be greater than the initial draft ordinance due to the expansion of the moratorium to existing developed subdivisions.

More significantly, the amended draft ordinance expands the moratorium to include small, isolated patches of habitat, which have little ecological value and lack long-term viability. As these patches are located within areas deemed suitable for future infill development and in many cases are currently almost fully developed, the whole concept undermines the public purpose served by the moratorium and the solid legal, scientific, and planning rationale for the designation of the Conservation and Natural Areas.

The most simple and defensible moratorium that can be implemented is one based on the Conservation and Natural Areas. The boundaries of these areas were delineated on a parcel by parcel basis taking into full account many factors, not simply out-dated or inaccurate habitat cover.

## **Recommendations**

The staff recommends that the draft amended ordinance be further amended to reflect one of the following options (listed in order of preference):

- o Enact a moratorium on all lands within the Conservation and Natural Areas, regardless of habitat;
- o Enact a moratorium on the clearing of any tropical hardwood hammock or pinelands habitat within the Conservation and Natural Areas;
- o Limit the moratorium to tropical hardwood hammocks or pinelands of one or more acres within the boundaries of the Conservation and Natural Areas; or,
- o Limit the moratorium to only tropical hardwood hammocks or pinelands of two or more acres within the boundaries of the Conservation and Natural Areas, as originally proposed and agreed to in the County-DCA partnership agreement.

## **Attachments**



# ATTACHMENT

1

Monroe County Department of Planning and Environmental Resources  
2798 Overseas Highway  
305-289-2500

# Memo

Marathon Florida 33050  
[conaway@mail.state.fl.us](mailto:conaway@mail.state.fl.us)

May 5, 2004

TO: Monroe County Board of County Commissioners  
FROM: K. Marlene Conaway, Director *KMC*  
RE: Interim Moratorium Ordinance

## **Conservation and Natural Area Maps**

Conservation and Natural Area (CNA) map boundaries were adopted by the Board of County Commissioners in Resolution #346-2003. The purpose of these maps was to designate areas for acquisition from willing sellers. The Board of County Commissioners determined that a moratorium at that time was not warranted.

The CNA maps were developed to implement the Florida Keys Carrying Capacity Study (FKCCS) and Goal 105 of the Comprehensive Plan. The Conservation and Natural Areas include upland native vegetated lands above four acres in size, restoration areas between fragmented hammocks, known threatened and endangered species habitat, and buffer areas where appropriate.

Staff has further analyzed the Conservation and Natural Area maps approved for acquisition boundaries by the Board in August and considered requests by the public for review of specific properties. More than twenty properties were field inspected before the April BOCC meeting. Ricardo Calvo, consultant for the County and project leader for the FKCCS has also reviewed the maps and the staff recommendations for amendments. In addition to the amendments contained in the April packet the staff has reviewed a additional sites and are recommending two changes to the maps; one in the upper Keys and one in the Lower Keys. The Maps attached to the ordinance have been amended to reflect the recommended changes.

## **Staff Recommendation**

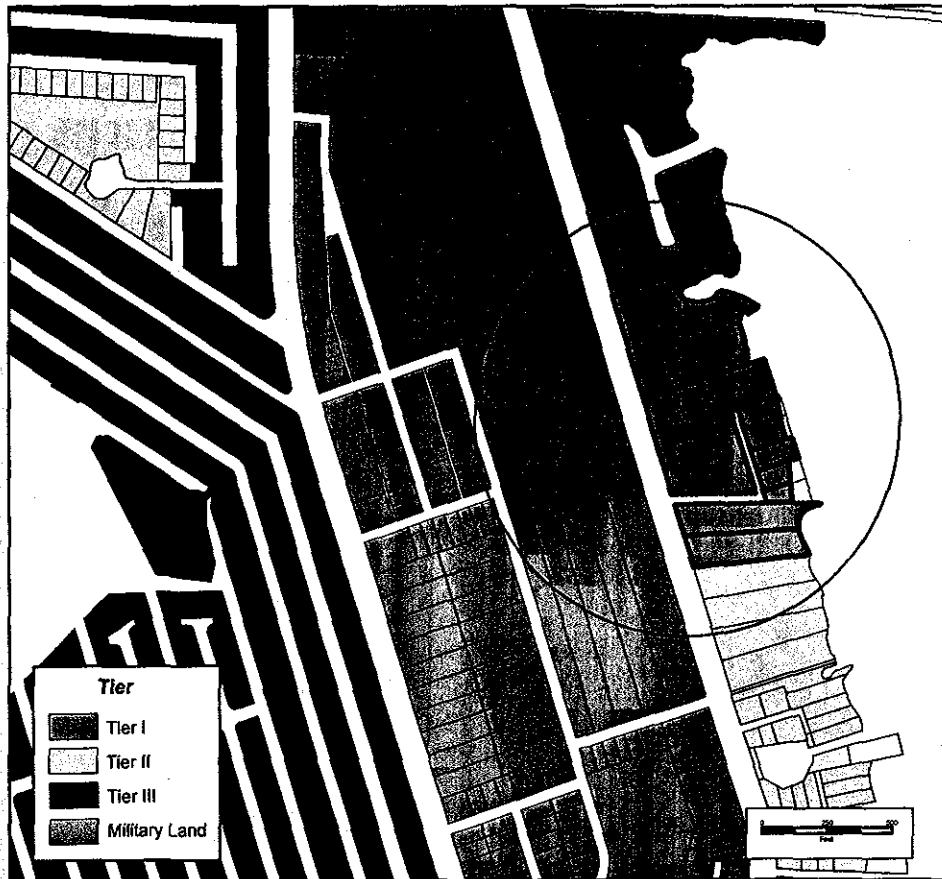
Staff recommends approval of the boundaries of the Conservation and Natural Areas as amended.

Cc, Timothy J. McGarry, Director Growth Management  
Rebecca Jetton, DCA

**Recommended Amendments**

**Conservation and Natural Area  
Maps**

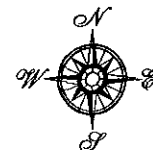
## Summerland, Summerland Estates: Review



### Summerland Estates on Summerland Key

This group of SR zoned lots are mostly developed with native vegetation. Similar SR zoned lots on the shoreline through out the County are not included in the Conservation and Natural Areas.

Staff recommends removing the designation.



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5/4/04